RAW SEQUENCE LISTING   DATE: 08/02/2002
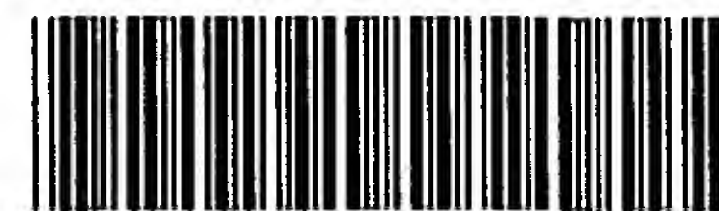PATENT APPLICATION: **US/09/164,764**   TIME: 13:55:19

Input Set : **N:\Crf3\RULE60\09164764.raw**
Output Set: **N:\CRF3\08022002\I164764.raw**

SEQUENCE LISTING
```
  3 (1) GENERAL INFORMATION:
  6       (i) APPLICANT: SIDRANSKY, DAVID
  9      (ii) TITLE OF INVENTION: DETECTION OF HYPERMUTABLE NUCLEIC ACID
 10                               SEQUENCE IN TISSUE
 12     (iii) NUMBER OF SEQUENCES: 40
 14      (iv) CORRESPONDENCE ADDRESS:
 15           (A) ADDRESSEE: Spensley Horn Jubas & Lubitz
 16           (B) STREET: 1880 Century Park East, Suite 500
 17           (C) CITY: Los Angeles
 18           (D) STATE: CA
 19           (E) COUNTRY: USA
 20           (F) ZIP: 90067
 22       (v) COMPUTER READABLE FORM:
 23           (A) MEDIUM TYPE: Diskette
 24           (B) COMPUTER: IBM Compatible
 25           (C) OPERATING SYSTEM: DOS
 26           (D) SOFTWARE: FastSEQ Version 1.1
 28      (vi) CURRENT APPLICATION DATA:
C--> 29       (A) APPLICATION NUMBER: US/09/164,764
C--> 30       (B) FILING DATE: 01-Oct-1998
 31           (C) CLASSIFICATION:
 33     (vii) PRIOR APPLICATION DATA:
 35           (A) APPLICATION NUMBER: US/08/854,727
 36           (B) FILING DATE: 12-MAY-1997
 38           (A) APPLICATION NUMBER: 08/299,477
 39           (B) FILING DATE: 31-AUG-1994
 41           (A) APPLICATION NUMBER:
 42           (B) FILING DATE: August 31, 1994
 44    (viii) ATTORNEY/AGENT INFORMATION:
 45           (A) NAME: Tumarkin, Ph.D., Lisa A.
 46           (B) REGISTRATION NUMBER: P-38,347
 47           (C) REFERENCE/DOCKET NUMBER: PD-3485
 49      (ix) TELECOMMUNICATION INFORMATION:
 50           (A) TELEPHONE: 619-455-5100
 51           (B) TELEFAX: 619-455-5110
 52           (C) TELEX:
 55 (2) INFORMATION FOR SEQ ID NO: 1:
 57       (i) SEQUENCE CHARACTERISTICS:
 58           (A) LENGTH: 18 base pairs
 59           (B) TYPE: nucleic acid
 60           (C) STRANDEDNESS: single
 61           (D) TOPOLOGY: linear
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ENTERED

RAW SEQUENCE LISTING   DATE: 08/02/2002
PATENT APPLICATION: US/09/164,764   TIME: 13:55:19

Input Set : **N:\Crf3\RULE60\09164764.raw**
Output Set: **N:\CRF3\08022002\I164764.raw**

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        63      (ii) MOLECULE TYPE: cDNA
        64     (iii) HYPOTHETICAL: NO
        65      (iv) ANTI-SENSE: NO
W--> 66        (v) FRAGMENT TYPE:
        67      (vi) ORIGINAL SOURCE:
        69      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
        71   CTTGTGTCCC GGCGTCTG                                    18
        73 (2) INFORMATION FOR SEQ ID NO: 2:
        75       (i) SEQUENCE CHARACTERISTICS:
        76            (A) LENGTH: 19 base pairs
        77            (B) TYPE: nucleic acid
        78            (C) STRANDEDNESS: single
        79            (D) TOPOLOGY: linear
        81      (ii) MOLECULE TYPE: cDNA
        82     (iii) HYPOTHETICAL: NO
        83      (iv) ANTI-SENSE: NO
W--> 84        (v) FRAGMENT TYPE:
        85      (vi) ORIGINAL SOURCE:
        87      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
        89   CAGCCCAGCA GGACCAGTA                                   19
        91 (2) INFORMATION FOR SEQ ID NO: 3:
        93       (i) SEQUENCE CHARACTERISTICS:
        94            (A) LENGTH: 21 base pairs
        95            (B) TYPE: nucleic acid
        96            (C) STRANDEDNESS: single
        97            (D) TOPOLOGY: linear
        99      (ii) MOLECULE TYPE: cDNA
       100     (iii) HYPOTHETICAL: NO
       101      (iv) ANTI-SENSE: NO
W--> 102       (v) FRAGMENT TYPE:
       103      (vi) ORIGINAL SOURCE:
       105      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
       107   TGGTAACAGT GGAATACTGA C                                21
       109 (2) INFORMATION FOR SEQ ID NO: 4:
       111       (i) SEQUENCE CHARACTERISTICS:
       112            (A) LENGTH: 21 base pairs
       113            (B) TYPE: nucleic acid
       114            (C) STRANDEDNESS: single
       115            (D) TOPOLOGY: linear
       117      (ii) MOLECULE TYPE: cDNA
       118     (iii) HYPOTHETICAL: NO
       119      (iv) ANTI-SENSE: NO
W--> 120       (v) FRAGMENT TYPE:
       121      (vi) ORIGINAL SOURCE:
       123      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
       125   ACTGATGCAA AAATCCTCAA C                                21
       127 (2) INFORMATION FOR SEQ ID NO: 5:
       129       (i) SEQUENCE CHARACTERISTICS:
       130            (A) LENGTH: 26 base pairs
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RAW SEQUENCE LISTING   DATE: 08/02/2002
PATENT APPLICATION: US/09/164,764   TIME: 13:55:19

Input Set : N:\Crf3\RULE60\09164764.raw
Output Set: N:\CRF3\08022002\I164764.raw

```
        131          (B) TYPE: nucleic acid
        132          (C) STRANDEDNESS: single
        133          (D) TOPOLOGY: linear
        135      (ii) MOLECULE TYPE: cDNA
        136     (iii) HYPOTHETICAL: NO
        137      (iv) ANTI-SENSE: NO
W--> 138       (v) FRAGMENT TYPE:
        139      (vi) ORIGINAL SOURCE:
        141      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
        143    GATGGGCAAA CTGCAGGCCT GGGAAG                          26
        145 (2) INFORMATION FOR SEQ ID NO: 6:
        147       (i) SEQUENCE CHARACTERISTICS:
        148          (A) LENGTH: 27 base pairs
        149          (B) TYPE: nucleic acid
        150          (C) STRANDEDNESS: single
        151          (D) TOPOLOGY: linear
        153      (ii) MOLECULE TYPE: cDNA
        154     (iii) HYPOTHETICAL: NO
        155      (iv) ANTI-SENSE: NO
W--> 156       (v) FRAGMENT TYPE:
        157      (vi) ORIGINAL SOURCE:
        159      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
        161    GCTACAAGGA CCCTTCGAGC CCCGTTC                         27
        163 (2) INFORMATION FOR SEQ ID NO: 7:
        165       (i) SEQUENCE CHARACTERISTICS:
        166          (A) LENGTH: 24 base pairs
        167          (B) TYPE: nucleic acid
        168          (C) STRANDEDNESS: single
        169          (D) TOPOLOGY: linear
        171      (ii) MOLECULE TYPE: cDNA
        172     (iii) HYPOTHETICAL: NO
        173      (iv) ANTI-SENSE: NO
W--> 174       (v) FRAGMENT TYPE:
        175      (vi) ORIGINAL SOURCE:
        177      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
        179    GATGGTGATG TGTTGAGACT GGTG                            24
        181 (2) INFORMATION FOR SEQ ID NO: 8:
        183       (i) SEQUENCE CHARACTERISTICS:
        184          (A) LENGTH: 24 base pairs
        185          (B) TYPE: nucleic acid
        186          (C) STRANDEDNESS: single
        187          (D) TOPOLOGY: linear
        189      (ii) MOLECULE TYPE: cDNA
        190     (iii) HYPOTHETICAL: NO
        191      (iv) ANTI-SENSE: NO
W--> 192       (v) FRAGMENT TYPE:
        193      (vi) ORIGINAL SOURCE:
        195      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
        197    GAGCATTTCC CCACCCACTG GAGG                            24
```

RAW SEQUENCE LISTING   DATE: 08/02/2002
PATENT APPLICATION: US/09/164,764   TIME: 13:55:19

Input Set : N:\Crf3\RULE60\09164764.raw
Output Set : N:\CRF3\08022002\I164764.raw

```
199 (2) INFORMATION FOR SEQ ID NO: 9:
201        (i) SEQUENCE CHARACTERISTICS:
202            (A) LENGTH: 20 base pairs
203            (B) TYPE: nucleic acid
204            (C) STRANDEDNESS: single
205            (D) TOPOLOGY: linear
207       (ii) MOLECULE TYPE: cDNA
208      (iii) HYPOTHETICAL: NO
209       (iv) ANTI-SENSE: NO
W--> 210       (v) FRAGMENT TYPE:
211       (vi) ORIGINAL SOURCE:
213       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
215    GTTCTGGATC ACTTCGCGGA                                    20
217 (2) INFORMATION FOR SEQ ID NO: 10:
219        (i) SEQUENCE CHARACTERISTICS:
220            (A) LENGTH: 20 base pairs
221            (B) TYPE: nucleic acid
222            (C) STRANDEDNESS: single
223            (D) TOPOLOGY: linear
225       (ii) MOLECULE TYPE: cDNA
226      (iii) HYPOTHETICAL: NO
227       (iv) ANTI-SENSE: NO
W--> 228       (v) FRAGMENT TYPE:
229       (vi) ORIGINAL SOURCE:
231       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
233    TGAGGATGGT TCTCCCCAAG                                    20
235 (2) INFORMATION FOR SEQ ID NO: 11:
237        (i) SEQUENCE CHARACTERISTICS:
238            (A) LENGTH: 20 base pairs
239            (B) TYPE: nucleic acid
240            (C) STRANDEDNESS: single
241            (D) TOPOLOGY: linear
243       (ii) MOLECULE TYPE: cDNA
244      (iii) HYPOTHETICAL: NO
245       (iv) ANTI-SENSE: NO
W--> 246       (v) FRAGMENT TYPE:
247       (vi) ORIGINAL SOURCE:
249       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
251    AGTGGTGAAT TAGGGGTGTT                                    20
253 (2) INFORMATION FOR SEQ ID NO: 12:
255        (i) SEQUENCE CHARACTERISTICS:
256            (A) LENGTH: 20 base pairs
257            (B) TYPE: nucleic acid
258            (C) STRANDEDNESS: single
259            (D) TOPOLOGY: linear
261       (ii) MOLECULE TYPE: cDNA
262      (iii) HYPOTHETICAL: NO
263       (iv) ANTI-SENSE: NO
W--> 264       (v) FRAGMENT TYPE:
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265        (vi) ORIGINAL SOURCE:
267        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:                    20
269     CTGCCATCTT GTGGAATCAT
271  (2) INFORMATION FOR SEQ ID NO: 13:
273         (i) SEQUENCE CHARACTERISTICS:
274             (A) LENGTH: 21 base pairs
275             (B) TYPE: nucleic acid
276             (C) STRANDEDNESS: single
277             (D) TOPOLOGY: linear
279        (ii) MOLECULE TYPE: cDNA
280       (iii) HYPOTHETICAL: NO
281        (iv) ANTI-SENSE: NO
W--> 282        (v) FRAGMENT TYPE:
283        (vi) ORIGINAL SOURCE:
285        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:                    21
287     CTGTGAGTTC AAAACCTATG G
289  (2) INFORMATION FOR SEQ ID NO: 14:
291         (i) SEQUENCE CHARACTERISTICS:
292             (A) LENGTH: 20 base pairs
293             (B) TYPE: nucleic acid
294             (C) STRANDEDNESS: single
295             (D) TOPOLOGY: linear
297        (ii) MOLECULE TYPE: cDNA
298       (iii) HYPOTHETICAL: NO
299        (iv) ANTI-SENSE: NO
W--> 300        (v) FRAGMENT TYPE:
301        (vi) ORIGINAL SOURCE:
303        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:                    20
305     GTGTCAGAGG ATCTGAGAAG
307  (2) INFORMATION FOR SEQ ID NO: 15:
309         (i) SEQUENCE CHARACTERISTICS:
310             (A) LENGTH: 24 base pairs
311             (B) TYPE: nucleic acid
312             (C) STRANDEDNESS: single
313             (D) TOPOLOGY: linear
315        (ii) MOLECULE TYPE: cDNA
316       (iii) HYPOTHETICAL: NO
317        (iv) ANTI-SENSE: NO
W--> 318        (v) FRAGMENT TYPE:
319        (vi) ORIGINAL SOURCE:
321        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:                    24
323     GCACGCTCTG GAACAGATTC TGGA
325  (2) INFORMATION FOR SEQ ID NO: 16:
327         (i) SEQUENCE CHARACTERISTICS:
328             (A) LENGTH: 24 base pairs
329             (B) TYPE: nucleic acid
330             (C) STRANDEDNESS: single
331             (D) TOPOLOGY: linear
333        (ii) MOLECULE TYPE: cDNA
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/164,764

DATE: 08/02/2002
TIME: 13:55:20

Input Set : N:\Crf3\RULE60\09164764.raw
Output Set: N:\CRF3\08022002\I164764.raw

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L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
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L:84 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=2
L:102 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=3
L:120 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=4
L:138 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=5
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L:174 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=7
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L:318 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=15
L:336 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=16
L:354 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=17
L:372 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=18
L:390 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=19
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